Livestock Questions in Population and Housing Censuses: Why are They Important?

The Population and Housing Census is the largest statistical operation undertaken by country governments, every ten years on average. The Census collates information on the quantity and quality of so-called human capital at national, regional and small area level, as well as on housing and on population’s access to basic services, such as water, electricity and telephone landlines.

Results of the census, which have no or very limited sampling errors, are used to ensure efficiency and equity in the distribution of public resources, such as for roads, human health facilities and schools. They are also used as benchmarks for statistical compilation and as a sampling frame for sample surveys, upon which many countries rely for the generation of good quality statistics on targeted domains.

Linking the Population and Housing Census with the Agricultural Census and with Agricultural Sample Surveys

The Population and Housing Census uses the household as its basic unit. The 2007 UN Principles and Recommendations for Population and Housing Censuses define the household as one or a group or two or more persons living together, who make common provision for food or other essentials for living, and who may, to a greater or lesser extent, pool together their incomes and have a common budget.

The Census of Agriculture and other agricultural sample surveys use the agricultural holding as their basic unit. This is defined as the economic unit of agricultural production under single management, comprising all land used for agricultural production purposes and all livestock kept.

In developing countries, the largest share of agricultural holdings are managed by the farm household, i.e. a household in which one or more members are engaged in agricultural production activities. It follows that, if farm households were identified in the Population and Housing Census, linkages with the Census and the Agricultural Census and other agricultural surveys could be generated, with a multitude of benefits:

- The identification of farm households in the Population Census allows identifying all agricultural holdings in the country and, hence, to build a sound sample frame for the agricultural census and for agricultural sample surveys.
- If some questions on agriculture were asked in the population census, the agricultural census could be reduced in scale, thereby generating savings. This information could be also used to better define the coverage of the agricultural census and of agricultural sample surveys, e.g. by improved targeting (minimum farm size).
- Undertaking the Population and Housing Census jointly with the Agricultural Census or with agricultural sample surveys, or the latter soon after the former, would enable the analysis of a much wider set of data, with the farm household allowing for direct linkages between the different datasets.

Livestock Items in the Population and Housing Census

A number of agricultural data items can be included in the Population and Housing Census, including on agricultural holders and their characteristics (e.g. sex and age); on farm area; crops grown; ownership of agricultural...
machinery; types of production system and purpose of production; ownership and use of livestock; land tenure; agricultural labour force; gender; and other.

The livestock content in the Uganda National Population and Housing Census

The 2013 Uganda Housing and Population Census contains the following three questions on livestock:

1. ‘Does this household currently undertake any of the following agricultural activities?
   - Exotic cross/breed cattle;
   - Local cattle rearing;
   - Goat rearing;
   - Sheep rearing;
   - Rabbit rearing;
   - Poultry/birds keeping;
   - Apiulture’

   Answers include: ‘yes, within enumeration area’; ‘yes, outside enumeration area but within the district’; ‘no’.
   If there is any ‘yes’ to the above question, then the following two questions are asked to the household:

2. ‘What is the main purpose of production?’
   Answers include: ‘home consumption’, ‘sale’, ‘NA’.

3. ‘Which of the household member is the holder?’

The FAO UNFA Guidelines for Linking Population and Housing Censuses with Agricultural Censuses present examples of Population Census Questionnaires. These, in most cases, contain the following two questions on livestock:

- A first question is about whether the household rears or not some farm animals and, if yes, of which species (e.g. cattle; pigs; poultry; etc.)
- A second question is about the number of animals reared by species.

Responses to the first question are essential to build an effective and up-to-date frame for a livestock census or for a specialized livestock sample survey, which may even target one specific sub-sector of livestock (e.g. small ruminants). Responses to the second question provide an estimation of the livestock population in the country, which is particularly relevant for countries that rarely undertake the Agricultural Census and/or undertake Agricultural Sample Censuses.

Beyond questions on animal ownership and number of animals owned, country governments have included a variety of livestock-related questions in the Population and Housing Census, such as on the purpose for keeping livestock or on who is responsible for tending the animals.

Ultimately, the livestock content of the Census very much depends on the relevance of livestock in the national economy, as well as on the policy process underpinning the formulation of the Census Questionnaire.

Recommendations

The FAO UNFA Guidelines for Linking Population and Housing Censuses with Agricultural Censuses recommends that an agricultural module in the Population and Housing Census should as a minimum provide information to build an effective and up-to-date frame for agricultural censuses and surveys, i.e. at least a question should be included on whether the household is engaged in any form of own account agricultural production (crops and livestock).

The Ministries responsible for animal resources may be tempted to ask for the inclusion of as many as possible questions on livestock. However, the value of including additional livestock-related questions should be carefully assessed, as it bears to risk to generate poor quality livestock-related data. For instance, there are concerns on whether, in the context of Population and Housing Censuses, households report the exact number of animals, i.e. on whether data from the Population and Housing Census could be effectively used to calculate the national livestock inventory.

In any case, the way in which questions are formulated and the use of common concepts, definitions and classifications are of paramount importance for making an effective use of the livestock data collected from the Population and Housing Census, including integration of Census data with data from other sources, such as the Agricultural Census and livestock sample surveys.

For further information please visit:
www.africalivestockdata.org

Or contact:
Ugo Pica-Ciamarra, FAO
ugo.picaciamarra@fao.org

Nancy Chin, FAO
nancy.chin@fao.org